10/17/03

```
=> File .Biotech
=> s (glucagon like peptide 1 or GLP1 or incretin hormone)
L1         6754  (GLUCAGON LIKE PEPTIDE 1 OR GLP1 OR INCRETIN HORMONE)

=> s l1 and (impaired glucose tolerance or IGT)
L2          259 L1 AND (IMPAIRED GLUCOSE TOLERANCE OR IGT)

=> s l2 and (treat? or ameliorat? or prevent? or therapeut?)
L3          194 L2 AND (TREAT? OR AMELIORAT? OR PREVENT? OR THERAPEUT?)

=> s l3 and (Non insulin dependnet diabetes melitus or NIDDM)
L4           82 L3 AND (NON INSULIN DEPENDNET DIABETES MELITUS OR NIDDM)

=> s l4 and (pancreatic beta cell#)
   5 FILES SEARCHED...
L6           20 L4 AND (PANCREATIC BETA CELL#)

=> s l4 and (receptor binding compound#)
L7            2 L4 AND (RECEPTOR BINDING COMPOUND#)

=> d l7 1-2 bib ab

L7   ANSWER 1 OF 2  USPATFULL on STN
AN     2003:133422  USPATFULL
TI     GLP-1 as a diagnostic test to determine beta-cell function and the
       presence of the condition of IGT and type-II diabetes
IN     Holst, J. J., Copenhagen N, DENMARK
       Vilsboll, Tina, Hellerup, DENMARK
PI     US 2003091507      A1   20030515
AI     US 2001-55259      A1   20011026 (10)
RLI    Division of Ser. No. US 1999-333415, filed on 15 Jun 1999, GRANTED, Pat.
       No. US 6344180
DT     Utility
FS     APPLICATION
LREP   MCKEE, VOORHEES & SEASE, P.L.C., ATTN: BIONEBRASKA, 801 GRAND AVENUE,
       SUITE 3200, DES MOINES, IA, 50309-2721
CLMN   Number of Claims: 14
ECL    Exemplary Claim: 1
DRWN   9 Drawing Page(s)
LN.CNT 798
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Since glucagon-like peptide-1
       (GLP-1) is the most potent insulinotropic hormone known and has been
       shown to stimulate insulin secretion strongly in patients with type II
       diabetes, this invention uses GLP-1 or its biologically active analogues
       in .beta.-cell stimulatory tests in order to test .beta.-cell function
       in a simple way. The test provides information about insulin secretory
       capacity, is easy and reproducible and has insignificant side effects.

L7   ANSWER 2 OF 2  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2000-126441 [11]   WPIDS
DNC  C2000-038461
TI   Novel glucagon-like peptide-1 used
     to improve the pancreatic beta-cell response to glucose.
DC   B04
IN   BYRNE, M; GOKE, B; COOLIDGE, T R; COLLIDGE, T
PA   (BION-N) BIONEBRASKA INC
CYC  87
PI   WO 9964061    A1 19991216 (200011)* EN   45p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
            GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
            LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
            TT UA UG US UZ VN YU ZA ZW
```

AU 9938899 A 19991230 (200022)
NO 2000006336 A 20010212 (200116)
EP 1083924 A1 20010321 (200117) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
CZ 2000004614 A3 20010613 (200138)
HU 2001002193 A2 20011029 (200175)
CN 1311687 A 20010905 (200201)
ZA 2000007383 A 20011128 (200202) 52p
BR 9911112 A 20011127 (200203)
KR 2001052800 A 20010625 (200209)
JP 2002517469 W 20020618 (200242) 48p
SK 2000001904 A3 20011106 (200254)
AU 758825 B 20030403 (200335)

ADT WO 9964061 A1 WO 1999-US10040 19990507; AU 9938899 A AU 1999-38899 19990507; NO 2000006336 A WO 1999-US10040 19990507, NO 2000-6336 20001212; EP 1083924 A1 EP 1999-921778 19990507, WO 1999-US10040 19990507; CZ 2000004614 A3 WO 1999-US10040 19990507, CZ 2000-4614 19990507; HU 2001002193 A2 WO 1999-US10040 19990507, HU 2001-2193 19990507; CN 1311687 A CN 1999-809181 19990507; ZA 2000007383 A ZA 2000-7383 20001212; BR 9911112 A BR 1999-11112 19990507, WO 1999-US10040 19990507; KR 2001052800 A KR 2000-714110 20001212; JP 2002517469 W WO 1999-US10040 19990507, JP 2000-553129 19990507; SK 2000001904 A3 WO 1999-US10040 19990507, SK 2000-1904 19990507; AU 758825 B AU 1999-38899 19990507

FDT AU 9938899 A Based on WO 9964061; EP 1083924 A1 Based on WO 9964061; CZ 2000004614 A3 Based on WO 9964061; HU 2001002193 A2 Based on WO 9964061; BR 9911112 A Based on WO 9964061; JP 2002517469 W Based on WO 9964061; SK 2000001904 A3 Based on WO 9964061; AU 758825 B Previous Publ. AU 9938899, Based on WO 9964061

PRAI US 1998-89044P 19980612

AB WO 9964061 A UPAB: 20020208

NOVELTY - The application of a novel **glucagon-like peptide-1** (GLP-1) in subjects with **impaired glucose tolerance** (**IGT**) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels, to restore the insulin secretion responses from the ss-cell to plasma glucose level increases which are characteristic of normal subjects without **IGT**.

DETAILED DESCRIPTION - A novel composition (I) comprises a compound which binds to a receptor for GLP-1 and a pharmaceutical carrier, the compound being present in an amount effective to enhance the sensitivity and response of pancreatic ss-cells to changes in plasma glucose, as measured by the timing and amount of insulin secretions in responses to increases in plasma glucose, in a human with **IGT**.

INDEPENDENT CLAIMS are also included for the following:

(1) **treating** an individual with **IGT** by administering (I) to produce one of the following effects:

(a) enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose; or

(b) to retard or arrest the loss of plasma glucose control and the development of non-insulin dependent diabetes mellitus (**NIDDM**); or

(c) to improve entrainment of ss-cell insulin secretory responses to exogenous glucose oscillations; or

(d) to enhance a normalization of insulin secretory patterns in **IGT**; or

(e) to reduce plasma insulin levels in an individual with **IGT**; or

(f) to reduce insulin resistance in an individual with **IGT**; or

(2) **treating** an individual whose symptoms indicate increased risk of a cardiovascular or cerebrovascular event, comprising administering (I) to enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose, and to reduce plasma insulin levels.

ACTIVITY - The **glucagon-like peptide-**

1 (GLP-1) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels.

MECHANISM OF ACTION - None given

USE - The methods, compositions and **glucagon-like peptide-1** (GLP-1) of the invention can be used in **therapeutic treatment** for normalizing **impaired glucose tolerance**. Administration of GLP-1 also regulates or normalizes insulin secretion pattern which will result in overall reduction of plasma insulin in **impaired glucose tolerance** (**IGT**). This normalization will in turn reduce the condition of insulin resistance. The effective **treatment** of **IGT** also decreases the risk of cardiovascular and cerbrovascular events. It can therefore be provided as a **preventative** to patients of known high risk for such events. Antibodies against GLP-1 can be used to identify GLP-1 like peptides for use in the methods of the invention.

ADVANTAGE - Administration of GLP-1 improves the function of the ss-cells to secrete insulin in response to increases in plasma glucose levels.

Dwg.0/6

```
=> s Goke, B?/au
L8          655 GOKE, B?/AU

=> s l6 and l8
L9            1 L6 AND L8

=> s Byrne, M?/au
L10        1826 BYRNE, M?/AU

=> s l10 and l6
L11           1 L10 AND L6

=> s Coolidge, T?/au
L12          93 COOLIDGE, T?/AU

=> s l12 and l6
L13           1 L12 AND L6

=> s l6 and (l8 or l10 or l12)
L14           1 L6 AND (L8 OR L10 OR L12)

=> d l14 bib ab

L14  ANSWER 1 OF 1  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2000-126441 [11]   WPIDS
DNC  C2000-038461
TI   Novel glucagon-like peptide-1 used
     to improve the pancreatic beta-cell response
     to glucose.
DC   B04
IN   BYRNE, M; GOKE, B; COOLIDGE, T R; COLLIDGE,
     T
PA   (BION-N) BIONEBRASKA INC
CYC  87
PI   WO 9964061    A1 19991216 (200011)* EN   45p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
            GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
            LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
            TT UA UG US UZ VN YU ZA ZW
     AU 9938899    A  19991230 (200022)
     NO 2000006336 A  20010212 (200116)
```

EP 1083924 A1 20010321 (200117) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
CZ 2000004614 A3 20010613 (200138)
HU 2001002193 A2 20011029 (200175)
CN 1311687 A 20010905 (200201)
ZA 2000007383 A 20011128 (200202) 52p
BR 9911112 A 20011127 (200203)
KR 2001052800 A 20010625 (200209)
JP 2002517469 W 20020618 (200242) 48p
SK 2000001904 A3 20011106 (200254)
AU 758825 B 20030403 (200335)

ADT WO 9964061 A1 WO 1999-US10040 19990507; AU 9938899 A AU 1999-38899 19990507; NO 2000006336 A WO 1999-US10040 19990507, NO 2000-6336 20001212; EP 1083924 A1 EP 1999-921778 19990507, WO 1999-US10040 19990507; CZ 2000004614 A3 WO 1999-US10040 19990507, CZ 2000-4614 19990507; HU 2001002193 A2 WO 1999-US10040 19990507, HU 2001-2193 19990507; CN 1311687 A CN 1999-809181 19990507; ZA 2000007383 A ZA 2000-7383 20001212; BR 9911112 A BR 1999-11112 19990507, WO 1999-US10040 19990507; KR 2001052800 A KR 2000-714110 20001212; JP 2002517469 W WO 1999-US10040 19990507, JP 2000-553129 19990507; SK 2000001904 A3 WO 1999-US10040 19990507, SK 2000-1904 19990507; AU 758825 B AU 1999-38899 19990507

FDT AU 9938899 A Based on WO 9964061; EP 1083924 A1 Based on WO 9964061; CZ 2000004614 A3 Based on WO 9964061; HU 2001002193 A2 Based on WO 9964061; BR 9911112 A Based on WO 9964061; JP 2002517469 W Based on WO 9964061; SK 2000001904 A3 Based on WO 9964061; AU 758825 B Previous Publ. AU 9938899, Based on WO 9964061

PRAI US 1998-89044P 19980612

AB WO 9964061 A UPAB: 20020208

NOVELTY - The application of a novel **glucagon-like peptide-1** (GLP-1) in subjects with **impaired glucose tolerance** (**IGT**) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels, to restore the insulin secretion responses from the ss-cell to plasma glucose level increases which are characteristic of normal subjects without **IGT**.

DETAILED DESCRIPTION - A novel composition (I) comprises a compound which binds to a receptor for GLP-1 and a pharmaceutical carrier, the compound being present in an amount effective to enhance the sensitivity and response of pancreatic ss-cells to changes in plasma glucose, as measured by the timing and amount of insulin secretions in responses to increases in plasma glucose, in a human with **IGT**.

INDEPENDENT CLAIMS are also included for the following:

(1) **treating** an individual with **IGT** by administering (I) to produce one of the following effects:

(a) enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose; or

(b) to retard or arrest the loss of plasma glucose control and the development of non-insulin dependent diabetes mellitus (**NIDDM**); or

(c) to improve entrainment of ss-cell insulin secretory responses to exogenous glucose oscillations; or

(d) to enhance a normalization of insulin secretory patterns in **IGT**; or

(e) to reduce plasma insulin levels in an individual with **IGT**; or

(f) to reduce insulin resistance in an individual with **IGT**; or

(2) **treating** an individual whose symptoms indicate increased risk of a cardiovascular or cerebrovascular event, comprising administering (I) to enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose, and to reduce plasma insulin levels.

ACTIVITY - The **glucagon-like peptide-1** (GLP-1) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels.

MECHANISM OF ACTION - None given

USE - The methods, compositions and **glucagon-like peptide-1** (GLP-1) of the invention can be used in **therapeutic treatment** for normalizing **impaired glucose tolerance**. Administration of GLP-1 also regulates or normalizes insulin secretion pattern which will result in overall reduction of plasma insulin in **impaired glucose tolerance** (**IGT**). This normalization will in turn reduce the condition of insulin resistance. The effective **treatment** of **IGT** also decreases the risk of cardiovascular and cerbrovascular events. It can therefore be provided as a **preventative** to patients of known high risk for such events. Antibodies against GLP-1 can be used to identify GLP-1 like peptides for use in the methods of the invention.

ADVANTAGE - Administration of GLP-1 improves the function of the ss-cells to secrete insulin in response to increases in plasma glucose levels.

Dwg.0/6

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=> d his

     (FILE 'HOME' ENTERED AT 10:01:02 ON 17 OCT 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, BIOTECHDS, EMBASE, USPATFULL, WPIDS'
     ENTERED AT 10:01:22 ON 17 OCT 2003
L1          6754 S (GLUCAGON LIKE PEPTIDE 1 OR GLP1 OR INCRETIN HORMONE)
L2           259 S L1 AND (IMPAIRED GLUCOSE TOLERANCE OR IGT)
L3           194 S L2 AND (TREAT? OR AMELIORAT? OR PREVENT? OR THERAPEUT?)
L4            82 S L3 AND (NON INSULIN DEPENDNET DIABETES MELITUS OR NIDDM)
L5             0 S L4 (L) RECEPTOR BINDING COMPOND
L6            20 S L4 AND (PANCREATIC BETA CELL#)
L7             2 S L4 AND (RECEPTOR BINDING COMPOUND#)
L8           655 S GOKE, B?/AU
L9             1 S L6 AND L8
L10         1826 S BYRNE, M?/AU
L11            1 S L10 AND L6
L12           93 S COOLIDGE, T?/AU
L13            1 S L12 AND L6
L14            1 S L6 AND (L8 OR L10 OR L12)

=> s l6 and (GLP-1 or 7-37 or 7-36 amide)
   6 FILES SEARCHED...
L15           19 L6 AND (GLP-1 OR 7-37 OR 7-36 AMIDE)

=> dup rem l15
PROCESSING COMPLETED FOR L15
L16           19 DUP REM L15 (0 DUPLICATES REMOVED)

=> d l16 1-19 bib ab

L16  ANSWER 1 OF 19  USPATFULL on STN
AN     2003:277208  USPATFULL
TI     Combination therapy comprising glucose reabsorption inhibitors and
       retinoid-x receptor modulators
IN     Bussolari, Jacqueline C., Skillman, NJ, UNITED STATES
       Chen, Xiaoli, Belle Mead, NJ, UNITED STATES
       Conway, Bruce R., Doylestown, PA, UNITED STATES
       Demarest, Keith T., Flemington, NJ, UNITED STATES
       Ross, Hamish N.M., Far Hills, NJ, UNITED STATES
       Severino, Rafael, Madrid, SPAIN
PI     US 2003195235      A1   20031016
AI     US 2003-372517     A1   20030224 (10)
RLI    Division of Ser. No. US 2002-115725, filed on 3 Apr 2002, PENDING
PRAI   US 2001-281479P     20010404 (60)
```

DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2291
AB Combination therapy comprising RXR modulators and glucose reabsorption inhibitors useful for the **treatment** of diabetes and Syndrome X are disclosed.

L16 ANSWER 2 OF 19 USPATFULL on STN
AN 2003:244997 USPATFULL
TI Amide derivatives as **therapeutic** agents
IN Kodra, Janos Tibor, Copenhagen, DENMARK
Lau, Jesper, Farum, DENMARK
Guzel, Mustafa, Jamestown, NC, UNITED STATES
Santhosh, Kalpathy Chidambareswaran, High Point, NC, UNITED STATES
Mjalli, Adnan M. M., Jamestown, NC, UNITED STATES
Andrews, Robert Carl, Jamestown, NC, UNITED STATES
Polisetti, Dharma Rao, Greensboro, NC, UNITED STATES
PI US 2003171411 A1 20030911
AI US 2002-323290 A1 20021219 (10)
PRAI EP 2002-388015 20020219
US 2001-386185P 20011221 (60)
DT Utility
FS APPLICATION
LREP Novo Nordisk Pharmaceuticals, Inc., 100 College Road West, Princeton, NJ, 08540
CLMN Number of Claims: 163
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5928
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to compounds of the general formula ##STR1##

which are activators of glucokinase (GK), and which may be useful for the management, **treatment**, control, or adjunct **treatment** of diseases or conditions, where increasing glucokinase activity is beneficial, for example diseases such as **IGT**, Syndrome X, type 2 diabetes, type 1 diabetes, dyslipidemia, hyperlipidemia, hypertension, and obesity.

L16 ANSWER 3 OF 19 USPATFULL on STN
AN 2003:200433 USPATFULL
TI Use of glucokinase activator in combination with a glucagon antagonist for **treating** type 2 diabetes
IN Lau, Jesper, Farum, DENMARK
PI US 2003138416 A1 20030724
AI US 2002-308355 A1 20021203 (10)
PRAI DK 2001-1789 20011203
DK 2001-1917 20011219
DK 2001-1925 20011220
DK 2002-1006 20020627
DK 2002-999 20020627
DK 2002-1117 20020718
EP 2002-388015 20020219
US 2001-336876P 20011205 (60)
US 2001-342428P 20011220 (60)
US 2001-342355P 20011220 (60)
US 2001-386185P 20011221 (60)
US 2002-394145P 20020703 (60)
DT Utility
FS APPLICATION

LREP Novo Nordisk Pharmaceuticals, Inc., 100 College Road West, Princeton, NJ, 08540
CLMN Number of Claims: 43
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1169
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to the use of a combination of a glucokinase activator and a glucagon antagonist for the management, **treatment**, control, or adjunct **treatment** of diseases, where increasing glucokinase activity and inhibiting the activity of glucagon is beneficial, such as for management, **treatment**, control, or adjunct **treatment** of type 1 diabetes or type 2 diabetes.

L16 ANSWER 4 OF 19 USPATFULL on STN
AN 2003:180839 USPATFULL
TI Peptides acting as both **GLP-1** receptor agonists and glucagon receptor antagonists and their pharmacological methods of use
IN Pan, Clark, Castro Valley, CA, UNITED STATES
Whelan, James, Madison, CT, UNITED STATES
Clairmont, Kevin B., Cheshire, CT, UNITED STATES
PI US 2003124669 A1 20030703
AI US 2002-265345 A1 20021003 (10)
PRAI US 2001-327730P 20011005 (60)
US 2002-408288P 20020906 (60)
DT Utility
FS APPLICATION
LREP JEFFREY M. GREENMAN, VICE PRESIDENT, PATENTS AND LICENSING, BAYER CORPORATION, 400 MORGAN LANE, WEST HAVEN, CT, 06516
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides polypeptides that act both as an agonist of the **GLP-1** receptor and an antagonist of the glucagon receptor. Such polypeptides are useful for **treating** individuals with type 2 diabetes or other metabolic disorders.

L16 ANSWER 5 OF 19 USPATFULL on STN
AN 2003:133422 USPATFULL
TI **GLP-1** as a diagnostic test to determine beta-cell function and the presence of the condition of **IGT** and type-II diabetes
IN Holst, J. J., Copenhagen N, DENMARK
Vilsboll, Tina, Hellerup, DENMARK
PI US 2003091507 A1 20030515
AI US 2001-55259 A1 20011026 (10)
RLI Division of Ser. No. US 1999-333415, filed on 15 Jun 1999, GRANTED, Pat. No. US 6344180
DT Utility
FS APPLICATION
LREP MCKEE, VOORHEES & SEASE, P.L.C., ATTN: BIONEBRASKA, 801 GRAND AVENUE, SUITE 3200, DES MOINES, IA, 50309-2721
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 798
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Since **glucagon-like peptide-1** (**GLP-1**) is the most potent insulinotropic hormone known and has been shown to stimulate insulin secretion strongly in patients with type II diabetes, this invention uses **GLP-1** or its biologically active analogues in .beta.-cell stimulatory tests in

order to test .beta.-cell function in a simple way. The test provides information about insulin secretory capacity, is easy and reproducible and has insignificant side effects.

L16 ANSWER 6 OF 19 USPATFULL on STN
AN 2003:106816 USPATFULL
TI Combination of FBPase inhibitors and antidiabetic agents useful for the **treatment** of diabetes
IN van Poelje, Paul D., La Jolla, CA, UNITED STATES
Erion, Mark D., Del Mar, CA, UNITED STATES
Fujiwara, Toshihiko, UNITED STATES
PI US 2003073728 A1 20030417
AI US 2001-900364 A1 20010705 (9)
PRAI US 2000-216531P 20000706 (60)
US 2000-215126P 20000629 (60)
DT Utility
FS APPLICATION
LREP BROBECK, PHLEGER & HARRISON LLP, 12390 EL CAMINO REAL, SAN DIEGO, CA, 92130
CLMN Number of Claims: 114
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 12671
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A combination therapy of at least one FBPase inhibitor and at least one other antidiabetic agent is disclosed.

L16 ANSWER 7 OF 19 USPATFULL on STN
AN 2003:79163 USPATFULL
TI Combination therapy comprising glucose reabsorption inhibitors and retinoid-X receptor modulators
IN Bussolari, Jacqueline C., Skillman, NJ, UNITED STATES
Chen, Xiaoli, Belle Mead, NJ, UNITED STATES
Conway, Bruce R., Doylestown, PA, UNITED STATES
Demarest, Keith T., Flemington, NJ, UNITED STATES
Ross, Hamish N.M., Far Hills, NJ, UNITED STATES
Severino, Rafael, Madrid, SPAIN
PI US 2003055091 A1 20030320
AI US 2002-115725 A1 20020403 (10)
PRAI US 2001-281479P 20010404 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2308
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Combination therapy comprising RXR modulators and glucose reabsorption inhibitors useful for the **treatment** of diabetes and Syndrome X are disclosed.

L16 ANSWER 8 OF 19 USPATFULL on STN
AN 2003:65429 USPATFULL
TI Combination therapy comprising glucose reabsorption inhibitors and PPAR modulators
IN Bussolari, Jacqueline C., Skillman, NJ, UNITED STATES
Chen, Xiaoli, Belle Mead, NJ, UNITED STATES
Conway, Bruce R., Doylestown, PA, UNITED STATES
Demarest, Keith T., Flemington, NJ, UNITED STATES
Ross, Hamish N.M., Far Hills, NJ, UNITED STATES
Severino, Rafael, Madrid, SPAIN
PI US 2003045553 A1 20030306
AI US 2002-115827 A1 20020403 (10)

PRAI US 2001-281429P 20010404 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 2106
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Combination therapy comprising PPAR modulators and glucose reabsorption inhibitors useful for the **treatment** of diabetes and Syndrome X are disclosed.

L16 ANSWER 9 OF 19 USPATFULL on STN
AN 2002:338023 USPATFULL
TI Pharmaceutical compositions containing an N-(substituted glycyl)-2-cyanopyrrolidine and at least one other antidiabetic agent and their use in inhibiting dipeptidyl peptidase-IV
IN Villhauer, Edwin Bernard, Morristown, NJ, UNITED STATES
PI US 2002193390 A1 20021219
AI US 2002-176440 A1 20020620 (10)
RLI Division of Ser. No. US 2001-879654, filed on 12 Jun 2001, GRANTED, Pat. No. US 6432969
PRAI US 2000-325743P 20000613 (60)
DT Utility
FS APPLICATION
LREP THOMAS HOXIE, NOVARTIS CORPORATION, PATENT AND TRADEMARK DEPT, 564 MORRIS AVENUE, SUMMIT, NJ, 079011027
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to certain N-(substituted glycyl)-2-cyanopyrrolidines of formula I ##STR1##

wherein Y is as defined herein, in free form or in acid addition salt form. Compounds of formula I inhibit DPP-IV (dipeptidyl-peptidase-IV) activity. They are therefore indicated for use as pharmaceuticals in inhibiting DPP-IV and in the **treatment** of conditions mediated by DPP-IV, such as non-insulin-dependent diabetes mellitus, arthritis, obesity, osteoporosis and further conditions of **impaired glucose tolerance.**

L16 ANSWER 10 OF 19 USPATFULL on STN
AN 2002:165232 USPATFULL
TI Fused 1,2,4- thiadiazine derivatives, their preparation and use
IN Hansen, John Bondo, Jyderup, DENMARK
Nielsen, Flemming Elmelund, Virum, DENMARK
PI US 2002086861 A1 20020704
AI US 2001-12145 A1 20011207 (10)
RLI Continuation of Ser. No. US 1999-464979, filed on 16 Dec 1999, PATENTED
PRAI DK 1998-1693 19981218
DK 1999-18 19990111
US 1999-115544P 19990112 (60)
US 1999-116438P 19990120 (60)
DT Utility
FS APPLICATION
LREP Reza Green, Esq., Nova Nordisk of North America, Inc., Suite 6400, 405 Lexington Avenue, New York, NY, 10174-6401
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1153

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to 4H-thieno[3,2-e]-1,2,4-thiadiazine derivatives of the general formula: ##STR1##

wherein X, Y, R.sup.1, R.sup.2 and R.sup.3 are defined in the description, compositions thereof and methods for preparing the compounds are described.

The compounds are useful in the **treatment** of diseases of the central nervous system, the cardiovascular system, the pulmonary system, the gastrointestinal system and the endocrinological system.

L16 ANSWER 11 OF 19 USPATFULL on STN
AN 2002:85530 USPATFULL
TI Method of **treating** the syndrome of type 2 diabetes in humans
IN Clemens, Anton H., Madison, WI, UNITED STATES
PA CPD, LLC, Madison, WI, UNITED STATES (U.S. corporation)
PI US 2002045572 A1 20020418
AI US 2001-878751 A1 20010611 (9)
RLI Continuation-in-part of Ser. No. US 2000-638930, filed on 15 Aug 2000, PENDING
DT Utility
FS APPLICATION
LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701
CLMN Number of Claims: 53
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 580
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method of **treating** a human suffering from the Syndrome of Type 2 Diabetes by administering, by a pharmaceutically effective mode, a drug composition having an opioidergic agent including opiates having .mu.-agonist activity, opiates having .kappa. antagonist activity or a combination thereof and an insulin secretagogue.

L16 ANSWER 12 OF 19 USPATFULL on STN
AN 2002:202098 USPATFULL
TI N-(substituted glycyl)-2 cyanopyrrolidines, pharmaceutical compositions containing them and their use in inhibiting dipeptidyl peptidase-IV
IN Villhauer, Edwin Bernard, Morristown, NJ, United States
PA Novartis AG, Basel, SWITZERLAND (non-U.S. corporation)
PI US 6432969 B1 20020813
AI US 2001-879654 20010612 (9)
PRAI US 2000-325743P 20000613 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Liu, Hong
LREP Borovian, Joseph J.
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 1627
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to certain N-(substituted glycyl)-2-cyanopyrrolidines of formula I ##STR1##

wherein Y is as defined herein, in free form or in acid addition salt form. Compounds of formula I inhibit DPP-IV (dipeptidyl-peptidase-IV) activity. They are therefore indicated for use as pharmaceuticals in inhibiting DPP-IV and in the **treatment** of conditions mediated by DPP-IV, such as non-insulin-dependent diabetes mellitus, arthritis, obesity, osteoporosis and further conditions of **impaired glucose tolerance**.

L16 ANSWER 13 OF 19 USPATFULL on STN
AN 2002:24038 USPATFULL
TI **GLP-1** as a diagnostic test to determine .beta.-cell function and the presence of the condition of **IGT** and type II diabetes
IN Holst, J. J., Copenhagen, DENMARK
Vilsboll, Tina, Hellerup, DENMARK
PA BioNebraska, Inc., Lincoln, NE, United States (U.S. corporation)
PI US 6344180 B1 20020205
AI US 1999-333415 19990615 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Nolan, Patrick J.
LREP Zarley, McKee, Thomte, Voorhees & Sease, P.L.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Since **glucagon-like peptide-1** (**GLP-1**) is the most potent insulinotropic hormone known and has been shown to stimulate insulin secretion strongly in patients with type II diabetes, this invention uses **GLP-1** or its biologically active analogues in .beta.-cell stimulatory tests in order to test .beta.-cell function in a simple way. The test provides information about insulin secretory capacity, is easy and reproducible and has insignificant side effects.

L16 ANSWER 14 OF 19 USPATFULL on STN
AN 2001:226624 USPATFULL
TI Fused 1,2,4-thiadiazine derivatives, their preparation and use
IN Hansen, John Bondo, Jyderup, Denmark
Nielsen, Flemming Elmelund, Virum, Denmark
PA Novo Nordisk A/S, Bagsvaerd, Denmark (non-U.S. corporation)
PI US 6329367 B1 20011211
AI US 1999-464979 19991216 (9)
PRAI DK 1998-1693 19981218
DK 1999-18 19990111
US 1999-115544P 19990112 (60)
US 1999-116438P 19990120 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom N.
LREP Green, Esq., Reza, Agris, Esq., Cheryl H.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1111
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to 4H-thieno[3,2-e]-1,2,4-thiadiazine derivatives of the general formula: ##STR1##

wherein X, Y, R.sup.1, R.sup.2 and R.sup.3 are defined in the description, compositions thereof and methods for preparing the compounds are described.

The compounds are useful in the **treatment** of diseases of the central nervous system, the cardiovascular system, the pulmonary system, the gastrointestinal system and the endocrinological system.

L16 ANSWER 15 OF 19 USPATFULL on STN
AN 2001:71545 USPATFULL
TI Fused 1,4-thiazine-2-carbonitrile derivatives, their preparation and use

IN Hansen, Holger Claus, V.ae butted.rl.o slashed.se, Denmark
Tagmose, Tina M.o slashed.ller, Ballerup, Denmark
Hansen, John Bondo, Jyderup, Denmark
PA Novo Nordisk A/S, Bagsvaerd, Denmark (non-U.S. corporation)
PI US 6232310 B1 20010515
AI US 2000-520447 20000308 (9)
PRAI DK 1999-353 19990312
US 1999-125883P 19990324 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: McKenzie, Thomas
LREP Zelson, Esq., Steve T., Rozek, Esq., Carol E.
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1463
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to fused 1,4-thiazine-2-carbonitrile derivatives, compositions thereof and methods for preparing the compounds.

The compounds are useful in the **treatment** of diseases of the central nervous system, the cardiovascular system, the pulmonary system, the gastrointestinal system and the endocrinological system.

L16 ANSWER 16 OF 19 USPATFULL on STN
AN 1999:12574 USPATFULL
TI Buccal delivery of glucagon-like insulinotropic peptides
IN Heiber, Sonia J., Salt Lake City, UT, United States
Ebert, Charles D., Salt Lake City, UT, United States
Gutniak, Mark K., Hasselby, Sweden
PA Theratech, Inc., Salt Lake City, UT, United States (U.S. corporation)
PI US 5863555 19990126
AI US 1997-964731 19971105 (8)
RLI Continuation of Ser. No. US 1995-553807, filed on 23 Oct 1995, now patented, Pat. No. US 5766620
DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos A.
LREP Thorpe, North & Western L.L.P.
CLMN Number of Claims: 62
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Drug delivery systems and methods for administering a glucagon-like insulinotropic peptide to the buccal mucosa for transmucosal drug delivery are described. The drug delivery systems comprise a drug composition containing an effective amount of the glucagon-like insulinotropic peptide and an effective amount of a permeation enhancer for enhancing permeation of glucagon-like insulinotropic peptide through the buccal mucosa and means for maintaining the drug composition in a drug transferring relationship with buccal mucosa. These systems can be in free form, such as creams, gels, and ointments, or can comprise a device of determined physical form, such as tablets, patches, and troches. A preferred glucagon-like insulinotropic peptide is **GLP -1(7-36)amide**.

L16 ANSWER 17 OF 19 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2000-126441 [11] WPIDS
DNC C2000-038461
TI Novel **glucagon-like peptide-1** used to improve the **pancreatic beta-cell** response to glucose.
DC B04

IN BYRNE, M; GOKE, B; COOLIDGE, T R; COLLIDGE, T
PA (BION-N) BIONEBRASKA INC
CYC 87
PI WO 9964061 A1 19991216 (200011)* EN 45p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9938899 A 19991230 (200022)
NO 2000006336 A 20010212 (200116)
EP 1083924 A1 20010321 (200117) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
CZ 2000004614 A3 20010613 (200138)
HU 2001002193 A2 20011029 (200175)
CN 1311687 A 20010905 (200201)
ZA 2000007383 A 20011128 (200202) 52p
BR 9911112 A 20011127 (200203)
KR 2001052800 A 20010625 (200209)
JP 2002517469 W 20020618 (200242) 48p
SK 2000001904 A3 20011106 (200254)
AU 758825 B 20030403 (200335)
ADT WO 9964061 A1 WO 1999-US10040 19990507; AU 9938899 A AU 1999-38899 19990507; NO 2000006336 A WO 1999-US10040 19990507, NO 2000-6336 20001212; EP 1083924 A1 EP 1999-921778 19990507, WO 1999-US10040 19990507; CZ 2000004614 A3 WO 1999-US10040 19990507, CZ 2000-4614 19990507; HU 2001002193 A2 WO 1999-US10040 19990507, HU 2001-2193 19990507; CN 1311687 A CN 1999-809181 19990507; ZA 2000007383 A ZA 2000-7383 20001212; BR 9911112 A BR 1999-11112 19990507, WO 1999-US10040 19990507; KR 2001052800 A KR 2000-714110 20001212; JP 2002517469 W WO 1999-US10040 19990507, JP 2000-553129 19990507; SK 2000001904 A3 WO 1999-US10040 19990507, SK 2000-1904 19990507; AU 758825 B AU 1999-38899 19990507
FDT AU 9938899 A Based on WO 9964061; EP 1083924 A1 Based on WO 9964061; CZ 2000004614 A3 Based on WO 9964061; HU 2001002193 A2 Based on WO 9964061; BR 9911112 A Based on WO 9964061; JP 2002517469 W Based on WO 9964061; SK 2000001904 A3 Based on WO 9964061; AU 758825 B Previous Publ. AU 9938899, Based on WO 9964061
PRAI US 1998-89044P 19980612
AB WO 9964061 A UPAB: 20020208
NOVELTY - The application of a novel **glucagon-like peptide-1** (**GLP-1**) in subjects with **impaired glucose tolerance** (**IGT**) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels, to restore the insulin secretion responses from the ss-cell to plasma glucose level increases which are characteristic of normal subjects without **IGT**.

DETAILED DESCRIPTION - A novel composition (I) comprises a compound which binds to a receptor for **GLP-1** and a pharmaceutical carrier, the compound being present in an amount effective to enhance the sensitivity and response of pancreatic ss-cells to changes in plasma glucose, as measured by the timing and amount of insulin secretions in responses to increases in plasma glucose, in a human with **IGT**.

INDEPENDENT CLAIMS are also included for the following:

(1) **treating** an individual with **IGT** by administering (I) to produce one of the following effects:

(a) enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose; or

(b) to retard or arrest the loss of plasma glucose control and the development of non-insulin dependent diabetes mellitus (**NIDDM**); or

(c) to improve entrainment of ss-cell insulin secretory responses to exogenous glucose oscillations; or

(d) to enhance a normalization of insulin secretory patterns in

IGT; or
(e) to reduce plasma insulin levels in an individual with **IGT**
; or
(f) to reduce insulin resistance in an individual with **IGT**;
or
(2) **treating** an individual whose symptoms indicate increased risk of a cardiovascular or cerebrovascular event, comprising administering (I) to enhance the regularity if insulin responses and its amplitude in reaction to changes in plasma glucose, and to reduce plasma insulin levels.
ACTIVITY - The **glucagon-like peptide-1** (**GLP-1**) reestablishes the tightly coordinated response of insulin secretion to increases in plasma glucose levels.
MECHANISM OF ACTION - None given
USE - The methods, compositions and **glucagon-like peptide-1** (**GLP-1**) of the invention can be used in **therapeutic treatment** for normalizing **impaired glucose tolerance**. Administration of **GLP-1** also regulates or normalizes insulin secretion pattern which will result in overall reduction of plasma insulin in **impaired glucose tolerance** (**IGT**). This normalization will in turn reduce the condition of insulin resistance. The effective **treatment** of **IGT** also decreases the risk of cardiovascular and cerbrovascular events. It can therefore be provided as a **preventative** to patients of known high risk for such events. Antibodies against **GLP-1** can be used to identify **GLP-1** like peptides for use in the methods of the invention.
ADVANTAGE - Administration of **GLP-1** improves the function of the ss-cells to secrete insulin in response to increases in plasma glucose levels.
Dwg.0/6

L16 ANSWER 18 OF 19 USPATFULL on STN
AN 1998:156943 USPATFULL
TI Compositions and methods for buccal delivery of pharmaceutical agents
IN Ebert, Charles D., Salt Lake City, UT, United States
Heiber, Sonia J., Salt Lake City, UT, United States
Gutniak, Mark K., Hasselby, Sweden
PA Theratech, Inc., Salt Lake City, UT, United States (U.S. corporation)
PI US 5849322 19981215
AI US 1995-546994 19951023 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos
LREP Thorpe, North & Western, LLP
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1307
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition for transmucosally administering a drug to the oral cavity comprises an adhesive layer comprising a hydrophilic polymer having one surface adapted to contact a first tissue of the oral cavity and adhere thereto when wet and an opposing surface in contact with and adhering to an adjacent drug-containing layer comprising an effective amount of a drug and optionally an effective amount of a permeation enhancer, wherein the drug-containing layer is adapted to contact and be in drug transfer relationship with a mucosal tissue of the oral cavity when the adhesive layer contacts and adheres to the first tissue. Preferred drugs include peptides, such as glucagon-like insulinotropic peptides. A method of transmucosally administering a drug to the oral cavity is also disclosed.

L16 ANSWER 19 OF 19 USPATFULL on STN
AN 1998:68550 USPATFULL
TI Buccal delivery of glucagon-like insulinotropic peptides
IN Heiber, Sonia J., Salt Lake City, UT, United States
Ebert, Charles D., Salt Lake City, UT, United States
Gutniak, Mark K., Hasselby, Sweden
PA TheraTech, Inc., Salt Lake City, UT, United States (U.S. corporation)
PI US 5766620 19980616
AI US 1995-553807 19951023 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Azpuru, Carlos
LREP Thorpe, North & Western, L.L.P.
CLMN Number of Claims: 91
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1586
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Drug delivery systems and methods for administering a glucagon-like insulinotropic peptide to the buccal mucosa for transmucosal drug delivery are described. The drug delivery systems comprise a drug composition containing an effective amount of the glucagon-like insulinotropic peptide and an effective amount of a permeation enhancer for enhancing permeation of glucagon-like insulinotropic peptide through the buccal mucosa and means for maintaining the drug composition in a drug transferring relationship with with buccal mucosa. These systems can be in free form, such as creams, gels, and ointments, or can comprise a device of determined physical form, such as tablets, patches, and troches. A preferred glucagon-like insulinotropic peptide is **GLP-1(7-36)amide**.

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---Logging off of STN---

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Executing the logoff script...

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STN INTERNATIONAL LOGOFF AT 10:24:20 ON 17 OCT 2003